1. A method to enhance stability of a free layer, while retaining free layer signal strength, in a magnetic read head, comprising:

providing a pair of opposing permanent magnet layers separated by a first gap and magnetized in a first direction, that abut, and thereby provide longitudinal bias to, said free layer;

forming, at a distance above said permanent magnet layers, a pair of opposing additional bias layers that are separated by a second gap that is less than or equal to said first gap; and

then magnetizing said additional bias layers in a second direction that is antiparallel to said first direction.

2. The method of claim 1 wherein said additional bias layer is selected from the group consisting of CoPt, CoCrPt, CoNiCr, NiFe/IrMn, and CoFe/IrMn whereby it has good exchange coupling field with antiferromagnetic layers, giving it an effective coercivity that is between about 0.05 and 0.75 times that of said permanent magnet layer.

3. The method of claim 1 wherein said additional bias layer is deposited to a thickness that is at most 0.02 microns less than that of said permanent magnet layer.

4. The method of claim 1 wherein said first gap is between about 0.1 and 0.2 microns and said second gap is between about 0.08 and 0.2 microns.

5. The method of claim 1 wherein said distance above said permanent magnet layer of the opposing additional bias layer is between about 50 and 300 Angstroms.

6. The method of claim 1 wherein said magnetic read head is a CIP GMR head.

7. The method of claim 1 wherein said magnetic read head is a CPP GMR head.

8. The method of claim 1 wherein said magnetic read head is a TMR head.

9. A method to enhance stability of a free layer, while retaining free layer signal strength, in a magnetic read head, comprising:

providing a pair of opposing permanent magnet layers, separated by a first gap and magnetized in a first direction, that abut, and thereby provide longitudinal bias to, said free layer;

inserting, below said permanent magnet layers, a pair of opposing additional bias layers that are separated by a second gap that is less than or equal to said first gap; and

then magnetizing said additional bias layer in a second direction that is antiparallel to said first direction.

10. The method of claim 9 wherein said magnetic read head is a CIP GMR head.

11. The method of claim 9 wherein said magnetic read head is a CPP GMR head.

12. The method of claim 9 wherein said magnetic read head is a TMR head.

13. The method of claim 9 wherein said additional bias layer is selected from the group consisting of CoPt, CoCrPt, CoNiCr, NiFe/IrMn, and CoFe/IrMn whereby it has good exchange coupling field with antiferromagnetic layers, giving it an effective coercivity that is between about 0.05 and 0.75 times that of said permanent magnet layer.

14. The method of claim 9 wherein said additional bias layer is deposited to a thickness that is at most 0.02 microns less than that of said permanent magnet layer.

15. The method of claim 9 wherein said first gap is between about 0.1 and 0.2 microns and said second gap is between about 0.08 and 0.2 microns.

16. The method of claim 9 wherein said distance below said permanent magnet layer of the opposing additional bias layer is between about 50 and 300 Angstroms.

17. A magnetic read head having a free layer with enhanced stability and signal strength, comprising:

a pair of opposing permanent magnet layers, separated by a first gap and

magnetized in a first direction, that abut, and thereby provide longitudinal bias to, the free layer;

above said permanent magnet layers, a pair of opposing additional bias layers that are separated by a second gap that is less than or equal to said first gap; and

said additional bias layers being magnetized in a second direction that is antiparallel to said first direction.

18. The magnetic read head described in claim 17 is a CIP GMR head.

19. The magnetic read head described in claim 17 is a CPP GMR head.

20. The magnetic read head described in claim 17 is a TMR head.

21. The magnetic read head described in claim 17 wherein said additional bias layer is selected from the group consisting of CoPt, CoCrPt, CoNiCr, NiFe/IrMn, and CoFe/IrMn whereby it has good exchange coupling field with antiferromagnetic layers, giving it an effective coercivity that is between about 0.05 and 0.75 times that of said permanent magnet layer.

22. The magnetic read head described in claim 17 wherein said additional bias layer has a thickness that is at most 0.02 microns less than that of said permanent magnet layer.

23. The magnetic read head described in claim 17 wherein said first gap is between about 0.1 and 0.2 microns and said second gap is between about 0.08 and 0.2 microns.

24. The magnetic read head described in claim 17 wherein said distance above said permanent magnet layer of the opposing additional bias layer is between about 50 and 300 Angstroms.

25. A magnetic read head having a free layer with enhanced stability and signal strength, comprising:

a pair of opposing permanent magnet layers, separated by a first gap and magnetized in a first direction, that abut, and thereby provide longitudinal bias to, the free layer;

a distance below said permanent magnet layers, a pair of opposing additional bias layers that are separated by a second gap that is less than or equal to said first gap; and

said additional bias layer being magnetized in a second direction that is antiparallel to said first direction.

26. The magnetic read head described in claim 25 is a CIP GMR head.

27. The magnetic read head described in claim 25 is a CPP GMR head.

28. The magnetic read head described in claim 25 is a TMR head.

29. The magnetic read head described in claim 25 wherein said additional bias layer is selected from the group consisting of CoPt, CoCrPt, CoNiCr, NiFe/IrMn, and CoFe/IrMn whereby it has good exchange coupling field with antiferromagnetic layers, giving it an effective coercivity that is between about 0.05 and 0.75 times that of said permanent magnet layer.

30. The magnetic read head described in claim 25 wherein said additional bias layer has a thickness that is at most 0.02 microns less than that of said permanent magnet layer.

31. The magnetic read head described in claim 25 wherein said first gap is between about 0.1 and 0.2 microns and said second gap is between about 0.08 and 0.2 microns.

32. The magnetic read head described in claim 25 wherein said distance below said permanent magnet layer of the opposing additional bias layer is between about 50 and 300 Angstroms.